Remarks

Applicant has carefully reviewed the final office action and the Examiner's arguments with reference to prior art. Applicant includes a set of new claims 15 through 25 to be used as the basis of for the further examination of this application.

The claims are amended as follows: Claims 1 through 14, previously presented, are hereby cancelled. Claim 15 is based on previously presented claim 1 (submitted on January 4, 2007), which was reviewed by the Examiner. Claim 15 contains features relating to a stepped opening provided in a piston housing. This opening has a portion of smaller diameter and a portion of larger diameter. Correspondingly, the displacement piston comprises a portion of smaller diameter, movable within the portion of smaller diameter of the opening; and a portion of larger diameter, movable within the portion of larger diameter of the opening. Further, in the region of the portion of the opening with a smaller diameter, a coil is provided around the piston housing. The displacement piston element forms an armature that cooperates with the coil for providing electromagnetic drive (this feature is based on originally filed claim 13). The sub-claims set forth in claims 16 through 25 correspond to sub-claims 2 through 10 and claim 14 as originally filed.

It should be noted that claims 15 through 25 (with minor, non-substantive changes to conform the claims to US style and practice) have been allowed by the European Patent Office.

The differences between the currently presented claims and the prior art are as follows:

Spakowski varies from the features of the present application as follows:

- No stepped housing, but only a passage formed in an end cap at one end of the housing;
- No coil surrounding the housing;
- No portion of a displacement piston element constituting an armature for an electromagnetic drive;
- No fluid feed line provided in the displacement element and being open to a smaller diameter portion of an opening provided in the housing; and
- No opening of such a (not present) line closable by a second valve assembly and permitting fluid exchange into the inlet chamber.

Oh varies from the features of the present application as follows:

- No stepped housing having a portion of smaller diameter and a portion with larger diameter for receiving a correspondingly stepped shaped piston also having a portion with smaller diameter and a portion with larger diameter;
- No portion of smaller diameter of the piston element constituting an armature of an electromagnetic drive in a region of the housing surrounded by the coil and providing the opening of smaller diameter; and
- No opening of a fluid feed line provided in the displacement piston element via which the fluid feed line is open to the smaller diameter portion of the opening in the housing.

(Note: Oh shows an arrangement in which, in an end portion protruding from the housing 30, the piston is connected to a cylindrically shaped magnet paddle 62, which surrounds the coil arrangement for electromagnetic cooperation.

Therefore, in particular insofar as the arrangement of the electromagnetic drive

and as the shape of the piston and the housing receiving the piston is concerned, Oh shows a substantially different construction than the present invention).

Falk varies from the features of the present invention as follows:

- No stepped opening within a housing receiving correspondingly stepped portions of the displacement piston and guiding both of these portions;
- No portion of smaller diameter of the piston element providing an armature for an electromagnetic drive;
- No fluid feed line within the piston element and, correspondingly, no openings of such a fluid feed line, one of which is closable by the second valve assembly; and
- No coil arrangement surrounding the housing and a smaller diameter portion of the piston.

(Note: When studying Falk, it is obvious that the piston member comprises one portion 45/59 (see Fig. 1) having a constant diameter that is guided within a cylindrical opening of constant diameter within a housing. The end of this piston protruding from this opening carries a pole portion 48 of an electromagnetic drive that axially faces the electromagnet 100. By reciprocally moving this piston, fluid is alternately sucked in via an inlet opening and expelled via an outlet opening 44. (Note: Falk not only discloses a substantially different way of driving the piston, but also discloses a substantially different pumping action, in which there is no difference in the pumping action depending on the direction of movement of the piston. In particular, Falk shows a piston that does not comprise two piston portions, as disclosed in the first portion of new claim 15.)

Bez varies from the present invention as follows:

- Bez' only feature that shows some similarity to the present invention is that a displacement piston having two portions with different diameter is received within a correspondingly stepped opening within a housing. However, Bez has no central opening within the piston, and there is no electromagnetic drive comprising the smaller diameter portion of the piston as an armature and surrounding the housing. Further, all of those features relating to the central feed line within the piston are not disclosed in Bez.

Applicant respectfully believes that the above explanations should make it clear to the Examiner that the cited prior art documents show such different constructions (as compared to one another and, in particular, compared to the present invention) that even a combination of the prior art documents cannot anticipate the metering pump device of new claim 15. In particular, those features relating to the arrangement of the electromagnetic drive cannot be deduced from a single one of the prior art documents.

Applicant respectfully believes that the claims set forth herein are allowable in reference to the prior art documents cited by the Examiner. Applicant respectfully believes that the Examiner will agree with this statement.

This Amendment After Final Action is necessary to place the claims in condition for allowance or better condition for appeal. New claims 15 through 25 do not introduce new matter, and are clearly supported by the specification.

Applicant respectfully does not believe that the claims presented herewith require a search, and hence, no Request for Continued Examination is included with this

submission. If the Examiner believes the claims submitted herewith require a new search, Applicant will file a Request for Continued Examination. Applicant respectfully requests that the Examiner review this submission as quickly as possible so that, in the event an RCE is required, one may be filed without incurring extension fees.

Applicant wishes to thank the Examiner in advance for considering this submission in a time frame that will not require extension fees.

Respectfully submitted,

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I hereby certify that this correspondence is being transmitted to Mail Stop AF -Art Unit 3746, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 by facsimile transmission on7/`2/1007, fax number (571) 273-8300.

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